

ABSTRACT OF THE DISCLOSURE

[0029] An adaptive closed loop transmit power control system which does not require extensive factory calibration of power control loop bandwidths and feedback detect path gain settings over the power transition ranges, frequency bands of operation, temperature, and supply voltage is disclosed. The system automatically compensates for any gain or slope variations in the analog feedforward and feedback paths to maintain system stability and meet performance specifications. The system achieves this by using an adaptive digital signal processing (DSP) system architecture within the feedback path of this closed loop power control system. The system eliminates the need for extensive factory calibration of such parameters as loop bandwidths and feedback detect path gain settings over power transition ranges, frequency bands of operation, temperature, and supply voltage.